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**Date:** 1/26/2005 1:20:52 PM  
**Subject:** Fw: Review Comments for the South Crandall Lease MRP Revision

----- Forwarded by Dale Harber/R4/USDAFS on 01/26/2005 01:14 PM -----

Karl M  
Boyer/R4/USDAFS

	To
01/26/2005 01:12 PM	Dale Harber/R4/USDAFS@FSNOTES
	cc
	Karl M Boyer/R4/USDAFS@FSNOTES
	Subject
	Review Comments for the South Crandall Lease MRP Revision

(See attached file: South Crandall Review, 1-25-05.doc)

**CC:** Dale Harber <dharber@fs.fed.us>

Project: South Crandall Lease (UTU-78953).

Forest Service Review of MRP Revision.

Date: January 25, 2005.

**1. Chapter 3.**

a. The Forest Service (FS) understands that the wildlife map in the 1994 revision of the MRP, or a reference to that map, will be included in the current MRP revision. Chapter 3 has not been presented to the FS for this review; the chapter should be presented to determine whether this item has been included.

b. The updated vegetation map should also be presented to the FS for review.

**2. Chapter 5, Page 5-9, last paragraph, 3<sup>rd</sup> sentence.**

a. The sentence should be changed to read "According to this plan full extraction mining, (i.e. longwall mining) is not authorized in panels BC-4 and HIA-5 in areas with less than 600' overburden ~~until it is~~ **unless it can be** determined that these areas can be mined without adverse impacts to the Little Bear Canyon municipal watershed.

b. The same changes should be made to the notes on maps 5-2(H) and 5-2(BC), above panels HIA-5 and BC-4, respectively.

**3. Chapter 5, Page 5-26b, 2<sup>nd</sup> paragraph.**

The entire second paragraph should be deleted. Both the FS and DOGM have stated that the recharge mechanisms for Little Bear Spring are not well understood and definitive statements such as that made in the 2<sup>nd</sup> paragraph cannot be substantiated. The paragraph starts off with: "It should be noted that neither the Little Bear Spring, nor its recharge fault system, is located.....".

**4. Chapter 5, Page 5-26b, last paragraph.**

Genwal has not addressed health and safety concerns as requested by both the FS and DOGM; most importantly with regard to fire hazards.

**5. Chapter 7, Section 7.24, Page 7-2.**

A ground water monitoring plan is not discussed in the submittal; measurement frequency, analytes, field parameters, and methods should be discussed.

**6. Chapter 7, Section 7.24.1, Groundwater Information, Page 7-6, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs.**

The 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs ignore the studies that have indicated a northern or northwestern recharge zone for Little Bear Spring. The conclusions of the other studies need to be discussed in order to present an objective and unbiased analysis.

**7. Chapter 7, Section 7.24.1, Groundwater Information, Page 7-6, 4<sup>th</sup> and 5<sup>th</sup> paragraphs.**

The FS is aware of at least four hydrologic studies (not one) indicating a northerly or northwesterly recharge component associated with Little Bear Spring. All of these studies need to be referenced in Section 7.24.1 and copies of them placed in an

appendix with the rest of the studies. The 5<sup>th</sup> paragraph ignores the fact that the proposed longwall panels are in the area of recharge discussed in many of the hydrogeologic studies. Even one of the more recent studies, the 1998 Aqua-Track study performed by Water Technology and Research, Inc., stated that one of the survey lines to the west of the spring showed evidence of a continuous water bearing fracture from north to south and that this profile was proof that Little Bear Spring was being fed from both north and south.

It should also be kept in mind that after mining through an area, water from the Star Point Sandstone often times seeps up from the floor in areas where the potentiometric surface is above the coal seam elevation. This situation can decrease the hydrostatic pressure within the Star Point and could result in diminished flow at Little Bear Spring.

**8. Chapter 7, Section 7.27, Page 7-29, last paragraph on the page, first sentence.**

The second part of the first sentence should be deleted to comply with DOGM's instructions to Genwal and to be consistent with Stipulation #17 of the Decision Notice. The sentence should read "**Mitigation for potential disruption to the Little**

**Bear**

**Spring will be accomplished through the construction of a water treatment plant which will provide replacement water for the spring."**

**9. Appendix 7-15, Probable Hydrologic Consequences, Pages 3, 4 and 5.**

Comment #6, above, also applies to this section. A fair and unbiased analysis of all the hydrogeologic studies should be presented.

**10. Appendix 7-15, Probable Hydrologic Consequences, Page 5, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence.**

The paragraph is discussing springs. The 2<sup>nd</sup> sentence makes a very broad statement concerning them. It should be supported with references to specific springs that have exhibited this type of behavior.

**11. Appendix 7-15, Probable Hydrologic Consequences, Page 5, single sentence in middle of page.**

The sentence should be deleted. A fair and unbiased analysis of the hydrogeologic investigations do not support such a conclusion or definitive statement. The FS and DOGM have both previously stated that the recharge mechanisms for Little Bear Spring are not well understood and definitive statements such as the one on page 5 are not supported by the present state of knowledge regarding Little Bear Spring.

**12. Appendix 7-15, Probable Hydrologic Consequences, Page 5, 6<sup>th</sup> and 7<sup>th</sup> paragraphs.**

Comment #7 also applies to these paragraphs that are identical to the 4<sup>th</sup> and 5<sup>th</sup> paragraphs on page 7-6.

**13. Appendix 7-15, Probable Hydrologic Consequences, Page 6, 1<sup>st</sup> paragraph, 1<sup>st</sup> sentence.**

Comment #8, above, also applies here; the second half of the sentence should be deleted. The sentence should read “Mitigation for potential disruption to the Little Bear Spring will be accomplished through the construction of a water treatment plant which will provide replacement water for the spring.”

- 14. Appendix 7-15**, Probable Hydrologic Consequences, Page 8, 1<sup>st</sup> paragraph, last sentence.

The last sentence should be changed to be consistent with other statements in the MRP revision that refer to Little Bear Creek as perennially functioning.